

For more than 60 years, Suburban Water Systems (Suburban) has provided dependable, high-quality water that meets or exceeds federal and state health safety standards to thousands of families in the San Gabriel Valley and nearby areas. We are proud to report that 2013 was no exception.

### Who We Serve

Suburban provides drinking water to portions of La Mirada, Buena Park and La Habra. Suburban serves approximately 40,000 people. In 2013, 100 percent of Suburban's water supply was from local groundwater.

### Suburban's Drinking Water Complies With All Health, Safety Regulations

In order to ensure that tap water is safe to drink, the United States Environmental Protection Agency (USEPA) and the California Department of Public Health (CDPH) prescribe regulations that limit the amount of certain contaminants in water provided by public water systems. CDPH regulations also establish limits for contaminants in bottled water, which must provide the same protection for public health. Last year, as in the past, Suburban's drinking water was in full compliance with all applicable county, state and federal drinking water regulations. Our system of pumps, reservoirs and distribution pipelines are all routinely inspected, monitored and maintained by professional state-certified water system operators to protect the quality of the water from source to tap.

### Purpose Of This Report

This annual water quality report demonstrates Suburban's compliance with CDPH and USEPA regulations. It also provides important information to the public about where drinking water comes from, how drinking water is regulated, and what types of contaminants may be in the drinking water. You will find charts on the following page, which summarize the results of our ongoing water-quality testing program. Determine how the water quality in your area compares to government standards by finding the average values in the charts and comparing these values to the maximum contaminant level (MCL). Chemicals reported in the table were detected in the water by an independent accredited laboratory during 2013 or from the most recent tests. Most, but not all, of these chemicals occur naturally in the water. Some of these chemicals, however, are the result of industrial and agricultural contamination that occurred many decades ago. To help you understand what these test results mean, we have also included information about significant constituents, measurements, water quality definitions and advisories.

**Water Quality Goals** The water Suburban delivers to your home meets standards required by USEPA, CDPH and California Public Utilities Commission (PUC). Often, Suburban goes beyond what is required to monitor for constituents that have known health risks. The company uses only independent, state-certified water quality laboratories for testing. **The charts in this report include two types of water quality goals:**

- **Maximum Contaminant Level Goal (MCLG):** The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs are set by the USEPA.
- **Public Health Goal (PHG):** The level of a contaminant in drinking water below which there is no known or expected risk to health. PHGs are set by the California Environmental Protection Agency.

**Water Quality Standards** The quality of drinking water in the United States is regulated by the USEPA. Two state agencies, the CDPH and the PUC, supplement and enforce federal USEPA standards. Standards established by these agencies are used to set limits for substances that may affect health or aesthetic qualities of water. The water quality charts in this report cover the following standards:

- **Maximum Contaminant Level (MCL):** The highest level of a contaminant that is allowed in drinking water. Primary MCLs are set as close to the PHGs (or MCLGs) as is economically and technologically feasible. Secondary MCLs are set to protect the odor, taste and appearance of drinking water.
- **Maximum Residual Disinfectant Level (MRDL):** The highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.
- **Maximum Residual Disinfectant Level Goal (MRDLG):** The level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants.
- **Primary Drinking Water Standard (PDWS):** MCLs and MRDLs for contaminants that affect health along with their monitoring and reporting requirements, as well as water treatment requirements.
- **Regulatory Action Level (AL):** The concentration of a contaminant, which, if exceeded, triggers treatment or other requirements that a water system must follow.

Continued from page 1

**Contaminants That May Be In The Water** The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs and wells. As water travels over the surface of the land or through the ground, it dissolves naturally-occurring minerals and, in some cases, radioactive material, and can pick up substances resulting from the presence of animals or from human activity.

Contaminants that may be present in source water include:

- **Microbial contaminants**, such as viruses and bacteria that may come from sewage treatment plants, septic systems, agricultural livestock operations and wildlife.
- **Inorganic contaminants**, such as salts and metals that can be naturally-occurring or result from urban storm water runoff, industrial or domestic wastewater discharges, oil and gas production, mining or farming.
- **Pesticides and herbicides**, which may come from a variety of sources such as agriculture, urban storm water runoff, and residential uses.
- **Organic chemical contaminants**, including synthetic and volatile organic chemicals that are byproducts of industrial processes and petroleum production, and can also come from gas stations, urban storm water runoff, agricultural application and septic systems.
- **Radioactive contaminants** that can be naturally-occurring or be the result of oil and gas production and mining activities.
- **Lead**, if present in elevated levels, can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. Suburban is responsible for providing high-quality drinking water, but cannot control the variety of materials used in plumbing components. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to two minutes before using water for drinking or cooking. If you are concerned about lead in your water, you may wish to have your water tested. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline (800) 426-4791 or at [www.epa.gov/safewater/lead](http://www.epa.gov/safewater/lead).

**Are There Risks?** Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the USEPA's Safe Drinking Water Hotline (800) 426-4791.

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. USEPA/Centers for Disease Control (CDC) guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and other microbial contaminants are available from the Safe Drinking Water Hotline (800) 426-4791.

### **Public Participation Opportunities**

We value your input, concerns and suggestions. Please contact Michael Nutt, Communications Manager, at (626) 543-2531 or email him at [mnutt@swwc.com](mailto:mnutt@swwc.com) to inquire about possible future public participation opportunities. Also, please feel free to contact Ken Reich, Quality Assurance Manager, at (626) 543-2575, if you have any questions about water quality. **In addition, a number of local water boards hold monthly meetings that are open to the public, including:**

- **Metropolitan Water District of Southern California**  
Second Tuesday of the month, (213) 217-6000
- **Central Basin Municipal Water District**  
Fourth Monday of the month, (323) 201-5500
- **Water Replenishment District of Southern California**  
Third Thursday of the month, (562) 921-5521.

### **Source Water And Water Quality Assessments**

Suburban provides drinking water for its La Mirada Service Area (City of La Mirada and portions of La Habra and Buena Park) from its wells in the Main San Gabriel Groundwater Basin and the Central Groundwater Basin. Suburban also purchases supplemental drinking water from California Domestic Water Company (Cal Domestic). Cal Domestic water comes from wells in the Main San Gabriel Groundwater Basin.

Continued on page 3

Continued from page 2

Suburban and Cal Domestic have completed source water assessments in accordance with the federal Safe Drinking Water Act. The purpose of the source water assessment is to promote source water protection by identifying types of activities in the proximity of sources which could pose a threat to the water quality. Suburban and Cal Domestic source water assessments were completed in 2002 and concluded that groundwater sources are most vulnerable to the following activities or facilities associated with contaminants detected in the water supply: leaking underground storage tanks, known contaminant plumes from industrial waste discharges, and gas stations. In addition, the sources are considered most vulnerable to the following activities and facilities not associated with contaminants detected in the water supply: pesticide/fertilizer/petroleum storage and transfer areas, metal and machine shops, and agricultural drainage. You may request a summary of the assessments by contacting Ken Reich, Quality Assurance Manager, at (626) 543-2575 or you may request a complete copy from the CDPH at (818) 551-2049.

**Chloramines** Some areas in La Mirada receive water year-round from Suburban that contains a treatment chemical called chloramines. Chlorine and ammonia are combined at one of Suburban's treatment facilities to produce these chloramines. Chloramines are added to the water for public health protection because they prevent regrowth of bacteria in the distribution system pipes and also reduce the formation of certain disinfection byproducts that are regulated in drinking water. All of Suburban's water has some form of chlorine disinfectant residual at all times.

**Be advised that kidney dialysis units and aquarium owners must remove chloramines from water prior to use.** Hospitals or dialysis centers should be aware of the chloramines from water and should install proper chloramine removal equipment, such as carbon adsorption units. Aquarium owners can use readily available products to remove or neutralize chlorine. Chloraminated water is safe for people and animals to drink, and for all other general uses. Should you have any questions or concerns regarding chloramine in your water, please contact Ken Reich, Quality Assurance Manager at (626) 543-2575.

**Cal Domestic Water Company Water Quality Violation** On January 5, 2013, Suburban was notified by Cal Domestic that it had removed its Volatile Organic Chemical (VOC) Treatment Facility from service because an equipment malfunction had allowed levels of two VOCs, Tetrachloroethylene (PCE) and Trichloroethylene (TCE), to exceed the MCL allowed in drinking water. Cal Domestic estimates that Suburban potentially purchased water exceeding the PCE and TCE MCL for a minimum of eight and a maximum of 15 days. Following corrective actions taken by Cal Domestic, all water sample results returned to normal and CDPH was satisfied that the problem had been resolved. Some people who use water containing PCE and TCE in excess of the MCL over many years may experience liver problems and may have an increased risk of getting cancer.

**Cal Domestic Water Company Monitoring Violation** On December 27, 2013, the City of La Habra, one of Cal Domestic Water Company's retail water customers, detected total coliform bacteria in its distribution system. Pursuant to California and USEPA drinking water regulations, La Habra notified Cal Domestic and then collected repeat samples, which returned absent results, thus indicating no problems were occurring in its distribution system. Subsequent well samples, collected by Cal Domestic and analyzed for the pathogenic bacteria E. coli pursuant to the USEPA Groundwater Rule, were absent for E. coli. However, Cal Domestic failed to complete required sampling in a timely manner resulting in a non-health related monitoring violation issued by the CDPH. Even though this failure to monitor correctly had no impact on Suburban's customers and was not an emergency, as our customer, you



**This information is important!** Please have someone translate it for you.

Esta información es importante. Por favor pídale a alguien que se la traduzca.	這個資訊非常之重要。 請他人為您翻譯一下。	この情報は重要です。 翻訳を依頼してください。	Chi tiết này thật quan trọng. Xin nhớ người dịch cho quý vị.
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Continued from page 3

**SUBURBAN WATER SYSTEMS LA MIRADA DRINKING WATER SOURCES TESTED IN 2013**

Company or Agency Source Percent of Total 2013 Usage		California Domestic Water Co.		Suburban Water Systems		MCL Violation?	Typical Source of Contaminant
		Groundwater		Groundwater			
		15%		85%			
Chemical	MCL	PHG (MCLG)	Average	Range	Average	Range	
<b>Organic Chemicals</b>							
Tetrachloroethylene (ppb)	5	0.06	0.9	ND - 8	ND	ND	Yes-CD Industrial Solvent Contamination
Trichloroethylene	5	1.7	1.5	0.5 - 15	ND	ND	Yes-CD Industrial Solvent Contamination
<b>Radiologicals</b>							
Alpha Radiation (pCi/L)	15	(0)	<3	ND - 4.3	<3	ND - 4.1	No Erosion of Natural Deposits
Uranium (pCi/L)	20	0.43	2.6	2.1 - 3.6	1.6	ND - 2.5	No Erosion of Natural Deposits
<b>Inorganic Chemicals</b>							
Arsenic (ppb)	10	0.004	<2	ND - 2.8	<2	ND - 2.3	No Erosion of Natural Deposits
Barium (ppm)	1	2	0.13	0.12 - 0.13	<0.1	ND - 0.11	No Erosion of Natural Deposits
Fluoride (ppm) naturally-occurring	2	1	0.32	0.31 - 0.33	0.38	0.20 - 0.53	No Erosion of Natural Deposits
Nitrate (ppm as Nitrate)	45	45	17	11 - 21	4.9	ND - 14	No Fertilizers, Septic Tanks
<b>Secondary Standards*</b>							
Chloride (ppm)	500*	n/a	20	19 - 20	75	33 - 100	No Erosion of Natural Deposits
Color (color units)	15*	n/a	ND	ND	<3	ND - 10	No Naturally-Occurring Substances
Manganese (ppb)	50*	n/a	ND	ND	<20	ND - 53	No Erosion of Natural Deposits
MBAS - surfactants (ppb)	500*	n/a	55	ND - 110	ND	ND	No Municipal and Industrial Waste
Odor (TON)	3*	n/a	1	1	1	1	No Naturally-Occurring Organic Materials
Specific Conductance (µmho/cm)	1,600*	n/a	480	470 - 490	818	630 - 900	No Ions in Water; Seawater Influence
Sulfate (ppm)	500*	n/a	43	41 - 45	109	79 - 130	No Erosion of Natural Deposits
Total Dissolved Solids (ppm)	1,000*	n/a	295	280 - 310	517	370 - 600	No Erosion of Natural Deposits
Turbidity (ntu)	5*	n/a	0.03	ND - 0.3	<0.1	ND - 0.3	No Erosion of Natural Deposits
<b>Unregulated Contaminants</b>							
Alkalinity, total (ppm CaCO <sub>3</sub> )	Not Regulated	n/a	165	160 - 170	194	150 - 270	n/a Erosion of Natural Deposits
Calcium (ppm)	Not Regulated	n/a	64	60 - 67	59	39 - 93	n/a Erosion of Natural Deposits
Hardness, total (ppm CaCO <sub>3</sub> )	Not Regulated	n/a	205	190 - 220	205	160 - 310	n/a Erosion of Natural Deposits
Hardness, total (grains/gal)	Not Regulated	n/a	12	11 - 13	12	9 - 18	n/a Erosion of Natural Deposits
Magnesium (ppm)	Not Regulated	n/a	12	11 - 12	14	12 - 18	n/a Erosion of Natural Deposits
pH (pH units)	Not Regulated	n/a	7.5	7.3 - 7.7	7.9	7.6 - 8.2	n/a Acidity, Hydrogen Ions
Potassium (ppm)	Not Regulated	n/a	3.5	3.5	3.8	2.7 - 4.6	n/a Erosion of Natural Deposits
Sodium (ppm)	Not Regulated	n/a	16	15 - 16	89	58 - 140	n/a Erosion of Natural Deposits

ppb = parts-per-billion; ppm = parts-per-million; ppt = parts-per-trillion; pCi/L = picoCuries per liter; ntu = nephelometric turbidity units; ND = not detected; n/a = not applicable; NR = not required to be tested; TT = Treatment Technique; < = average is less than the detection limit for reporting purposes; MCL = Maximum Contaminant Level; (MCLG) = federal MCL Goal; PHG = California Public Health Goal; µmho/cm = micromho per centimeter; NL = Notification Level; \*Contaminant is regulated by a secondary standard to maintain aesthetic qualities.

**SUBURBAN WATER SYSTEMS LA MIRADA DISTRIBUTION SYSTEM WATER QUALITY TESTED IN 2013**

Chemical	MCL (MRDL/MRDLG)	Average	Range	MCL Violation?	Typical Source Of Contaminant
<b>Disinfection Byproducts</b>					
Total Trihalomethanes (ppb)	80	60	34 - 73	No	Byproducts of Chlorine Disinfection
Haloacetic Acids (ppb)	60	19	7.5 - 16	No	Byproducts of Chlorine Disinfection
Chlorine Residual (ppm)	(4/4)	1.0	ND - 3.9	No	Disinfectant Added for Treatment
<b>Aesthetic Quality</b>					
Color (Color Units)	15*	ND	ND	No	Erosion of Natural Deposits
Turbidity (ntu)	5*	<0.1	ND - 0.4	No	Erosion of Natural Deposits
Odor (threshold odor number)	3*	1	1	No	Erosion of Natural Deposits

Four locations in the distribution system are tested quarterly for total trihalomethanes and haloacetic acids; five locations are tested weekly for color, odor and turbidity. MRDL = Maximum Residual Disinfectant Level; MRDLG = Maximum Residual Disinfectant Level Goal; ntu = nephelometric turbidity units; ND = not detected; < = average is less than the detection limit for reporting purposes; ppb = parts-per-billion; ppm = parts-per-million; MCL = Maximum Contaminant Level; \*Contaminant is regulated by a secondary standard to maintain aesthetic qualities.

Bacterial Quality	MCL (MCLG=0)	Highest Monthly Percent Positives	MCL Violation?	Typical Source Of Contaminant
Total Coliform Bacteria	No more than 5% monthly positives	0	No	Naturally Present in the Environment

**LEAD AND COPPER ACTION LEVELS AT RESIDENTIAL TAPS**

Metal	Action Level	PHG	Ninetieth Percentile Value	Exceeding AL/ No. of Samples	AL Violation?	Typical Source Of Contaminant
Copper (ppm)	1.3	0.3	0.27	0/30	No	Corrosion of Household Plumbing
Lead (ppb)	15	0.2	<5	0/30	No	Corrosion of Household Plumbing

The most recent lead and copper at-the-tap samples were collected from residences in 2013. None of the 30 samples for lead and copper exceeded the respective Action Level (AL). A regulatory Action Level is the concentration of a contaminant, which, if exceeded, triggers treatment or other requirements that a water system must follow.